

AMENDMENT

Please amend the pending application in accordance with the following particulars.

In the Claims

The claims are amended as shown on the following pages under the heading LIST OF CURRENT CLAIMS. The list shows the status of all claims presently in the application and is intended to supersede all prior versions of the claims in the application. Any cancellation of claims is made without prejudice or disclaimer.

LIST OF CURRENT CLAIMS

1. (Currently Amended) A composition for a coding forming at least part of a coding system for a value document, comprising: a luminescent basic substance and at least one luminescent additive, ~~the coding composition being formed by the presence or absence of one or more of a luminescent additive, the type of additives, and the number of additives;~~

~~wherein the luminescent basic substance and the luminescent additives each have coding-relevant emission lines located in a joint emission range;~~

wherein the luminescent basic substance and the luminescent additives each have coding-relevant emission lines located in a joint emission range; and first and second luminescent additives are provided which form a pair of mutually associated luminescent substances, the emission spectra of the first and second additives, ~~which are so similar so as to be indistinguishable, overlapping in at least a subrange of the joint emission range such that the emission spectrum of the first additive is complemented by the emission spectrum of the second additive.~~

2. (Canceled)

3. (Previously Presented) The composition according to claim 1, wherein all coding-relevant emission lines are outside the visible spectral range.

4. (Previously Presented) The composition according to claim 1, wherein all coding-relevant emission lines are in the spectral range of from 750 nm to about 2500 nm.

5. (Previously Presented) The composition according to claim 1, wherein at least two luminescent additives are provided whose coding-relevant emission lines do not overlap with the coding-relevant emission lines of the basic substance in the joint emission range.

6. (Previously Presented) The composition according to claim 1, wherein at least one of the luminescent basic substance and at least one of the luminescent additives is formed on the basis of a doped host lattice.

7. (Previously Presented) The composition according to claim 1, wherein at least one of the luminescent basic substance and at least one of the luminescent additives is formed on the basis of a host lattice doped with rare earth elements.

8. (Previously Presented) The composition according to claim 1, wherein at least one of the luminescent basic substance and at least one of the luminescent additives is formed on the basis of a host lattice doped with a chromophore, the chromophore being selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper and zinc.

9. (Previously Presented) The composition according to claim 8, wherein at least one of the host lattices is doped with a plurality of chromophores.

10. (Currently Amended) The composition according to claim 6, wherein at least one of the host lattices is formed by a mixed crystal solid solution.

11. (Canceled)

12. (Currently Amended) The composition according to claim 1, wherein the first and second luminescent additives are formed [[by]] on the basis of a doped host lattice according to claim 6.

13. (Currently Amended) The composition according to claim 1, wherein the first and the second luminescent additives are formed on the basis of different host lattices which have crystal fields of different strength and which are each doped with the same dopant.

14. (Currently Amended) The composition according to claim 1, wherein the stated subrange where the emission spectra of the first and second luminescent additives complementarily overlap has a width of 200 nm or less.

15. (Currently Amended) The composition according to claim 1, wherein the stated subrange where the emission spectra of the first and second luminescent additives complementarily overlap extends in a range selected from the group consisting of from about 850 nm to about 970 nm; from about 920 nm to about 1060 nm; from about 1040 nm to about 1140 nm; from about 1100 nm to about 1400 nm; from about 1100 nm to about 1250 nm; from about 1120 nm to about 1220 nm; from about 1300 nm to about 1500 nm; and from about 1400 nm to about 1700 nm.

16. (Currently Amended) The composition according to claim 1, wherein the first and second luminescent additives have in the stated subrange at least one emission line in

each case whose positions have a distance apart of about 30 nm or less.

17. (Currently Amended) The composition according to claim 1, wherein the coding system composition has a plurality of pairs of mutually associated additives ~~according to claim 11 formed by providing a plurality of respective first and second luminescent additives, the emission spectra of the first and second additives overlapping in at least a subrange of the joint emission range.~~

18. (Currently Amended) The composition according to claim 17, wherein the subranges where the emission spectra of the first and second luminescent additives of a pair overlap each other ~~complementarily~~ are different for different pairs of mutually associated additives.

19. (Previously Presented) The composition according to claim 1, wherein the coding-relevant emission line of the luminescent basic substance is in the infrared spectral range above 1100 nm.

20. (Previously Presented) The composition according to claim 1, wherein a plurality of luminescent basic substances are provided.

21. (Previously Presented) A value document having a coding system formed by at least part of the coding composition according to claim 1.

22. (Previously Presented) The composition according to claim 7, wherein the host lattice is doped with one or more elements selected from the group consisting of

neodymium, erbium, holmium, thulium, ytterbium, praseodymium, and dysprosium.

23. (Previously Presented) The composition according to claim 14, wherein the overlap has a width of 100 nm or less.

24. (Previously Presented) The composition according to claim 16, wherein said distance is 20 nm or less.

25. (Previously Presented) The composition according to claim 24, wherein the distance is 10 nm or less.

26. (New) A composition for a coding forming at least part of a coding system for a value document, comprising: a luminescent basic substance and at least one luminescent additive;

wherein the luminescent basic substance and the luminescent additives each have coding-relevant emission lines located in a joint emission range; and first and second luminescent additives are provided which form a pair of mutually associated luminescent substances, the emission spectra of the first and second additives, which overlap each other so that the presence of the first and second luminescent additives can practically not be recognized.